

Title: Experiments from geometrical optics for teaching at primary and secondary school

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Abstract: This work is focused on experiments in geometric optics. There is a research of textbooks for primary and secondary schools, that deals with this topic of physics. Most of the work is dedicated to the proposed manuals for experiments for the exercise of geometric optics in Practical Course in School Experiments I. The manuals were tested with several groups of students at Practical Course. The test results are briefly summarized here, including several adjustments of the manuals that has risen from it. The work also deals with mirror telescopes, aberrations, and the production of models of two telescopes – Newtonian and Cassegrain printed on a 3D printer. The models are then used in two experiments for Practical Course.

Keywords: experiments, geometrical optics, optical instruments